

THE PROSTOMIAL PIT IN *BOTHRIONEURUM*
VEJDOVSKYANUM STOLC (OLIGOCHAETA):
A NOTE ON DETAIL REVEALED BY SEM

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Abstract.—Two SEM views of the prostomial pit in *Bothrioneurum vejdovskyanum* Stolc show that it contains cilia.

The genus *Bothrioneurum* of the Tubificidae (Oligochaeta) is partly defined by the presence of a dorsal ciliated pit in its prostomium (Brinkhurst and Jamieson, 1971). The purpose of this study was to illustrate the structure of this diagnostic feature by photographing the type-species, *B. vejdovskyanum* Stolc, under a scanning electron microscope.

Worms preserved in formalin were dehydrated with alcohol in 10% steps and brought up to 100% amyl acetate. The worms were then critical point dried, gold coated and examined under a JEOL JSM-35 scanning electron microscope.

Two views of the prostomial pit are presented. Figure 1 shows the position of the pit in the prostomium. Figure 2 is a high magnification (2,000 \times) view of the pit showing it to contain cilia. The prostomial pit is therefore shown to be a clearly defined structure containing cilia, which suggests that the pit has a chemosensory function.

Literature Cited

Brinkhurst, R. O. and B. G. M. Jamieson. 1971. Aquatic Oligochaeta of the world.—University of Toronto Press, Toronto, 860 pp.

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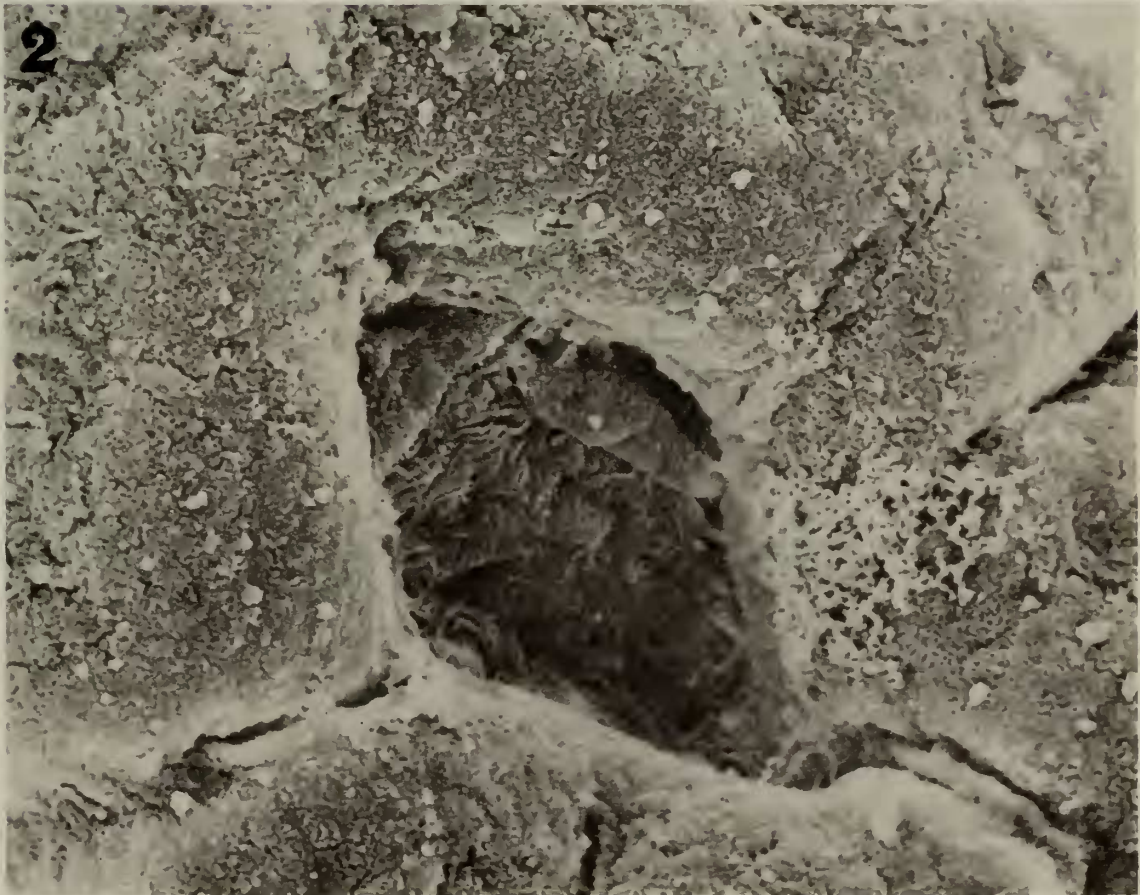
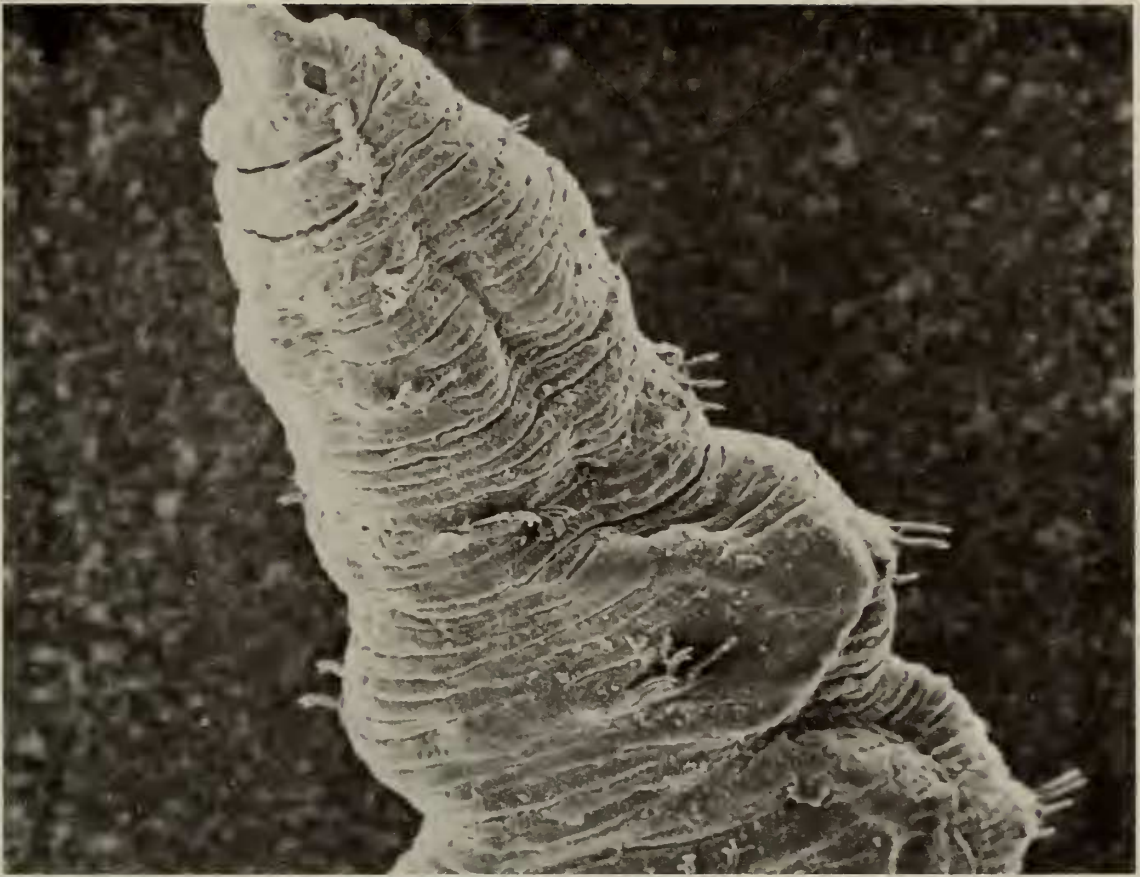


Fig. 1. Anterior region of *Bothrioneurum vej dovskyanum*. Note the pit in the center of the prostomium. 150 \times . Fig. 2. Prostomial pit of *Bothrioneurum vej dovskyanum*. 2,000 \times .